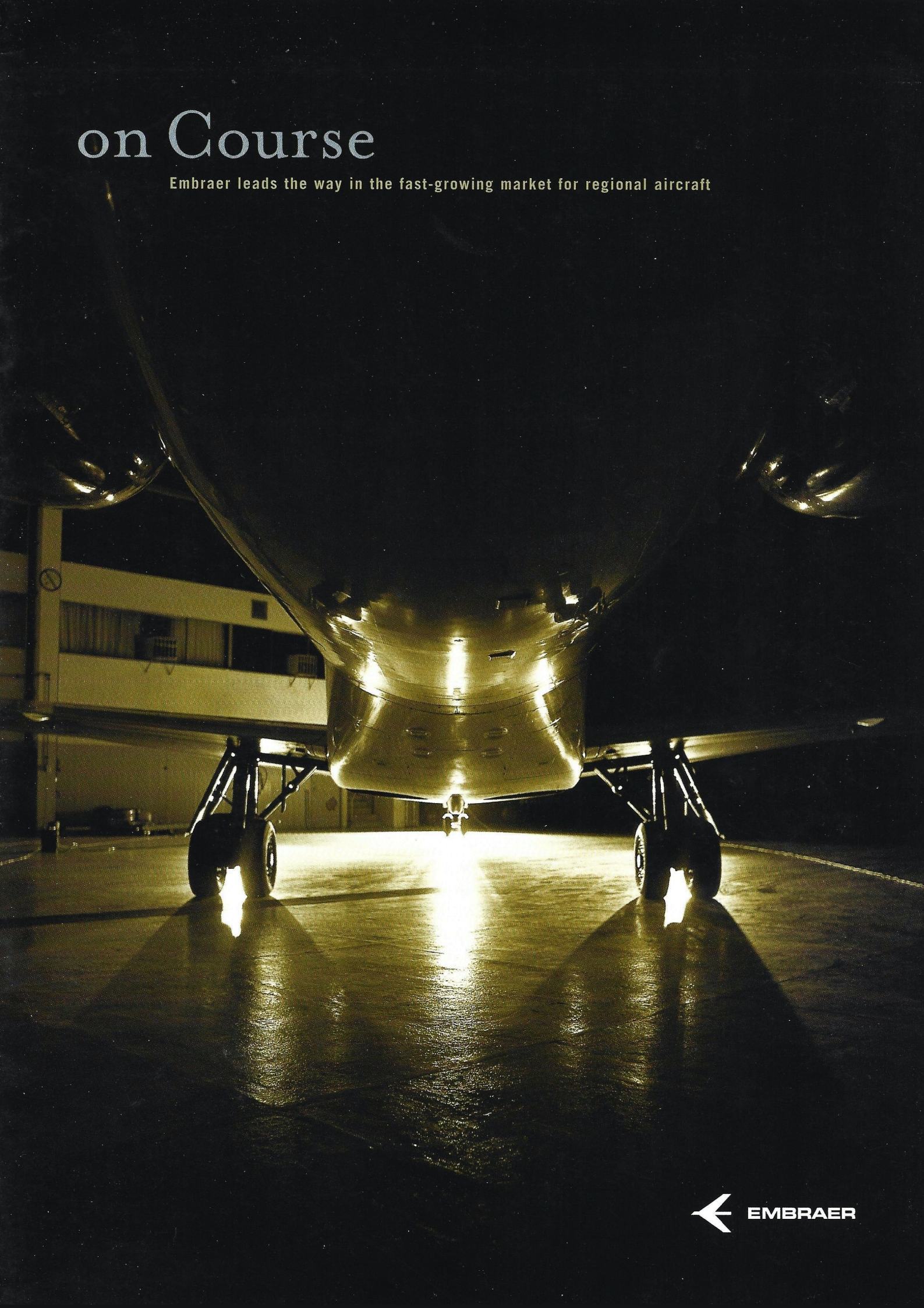
on Course

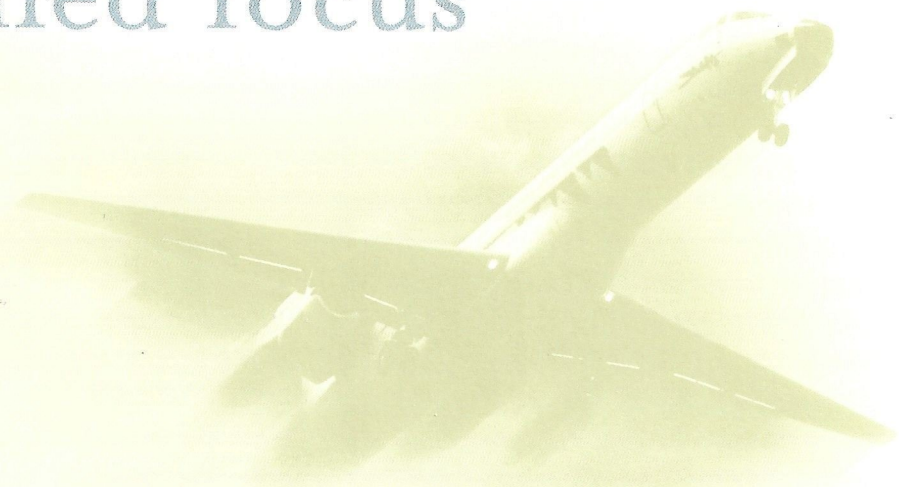
Embraer leads the way in the fast-growing market for regional aircraft



EMBRAER

a disciplined focus

on what we do best



Embraer has never sought to be everything to everyone in commercial and military aviation. Instead, we have become one of the largest aircraft manufacturers in the world by focusing our full attention on specific segments of the market that have both high growth potential and very particular requirements.

In commercial aviation, our focus is on regional airlines. These airlines are rapidly expanding their routes in Europe and in the Americas, and there is vast potential for regional carriers to expand in under-served areas. At the same time, fast, economical jets like the Embraer RJ145 are rapidly replacing older aircraft in regional fleets. The new jets are giving regional airlines better schedule and service flexibility. They are offering direct service between more locations, and allow service on routes that would be unprofitable with larger jets.

From preliminary design to after-sale service, Embraer is totally dedicated to meeting the needs of this market segment. To keep development costs down, we focus on customer needs rather than innovation at any cost. Our aircraft provide excellent performance with day-in and day-out reliability, while being economical to acquire and cost-effective to operate and maintain. They give passengers much of the look and feel of larger jets. Equally important,we provide a total product package, which includes aircraft and after sales support for parts, service and technical assistance.

Because we focus our full attention on a few clearly-defined commercial and military applications, we are able to utilize the most advanced technology and at the same time deliver aircraft that combine initial affordability with long-term reliability.

As a result, our commercial customers are able to provide service profitably to more passengers and more airports than ever before. And our military customers know that they have selected the optimal aircraft to assure the success of their specific missions.

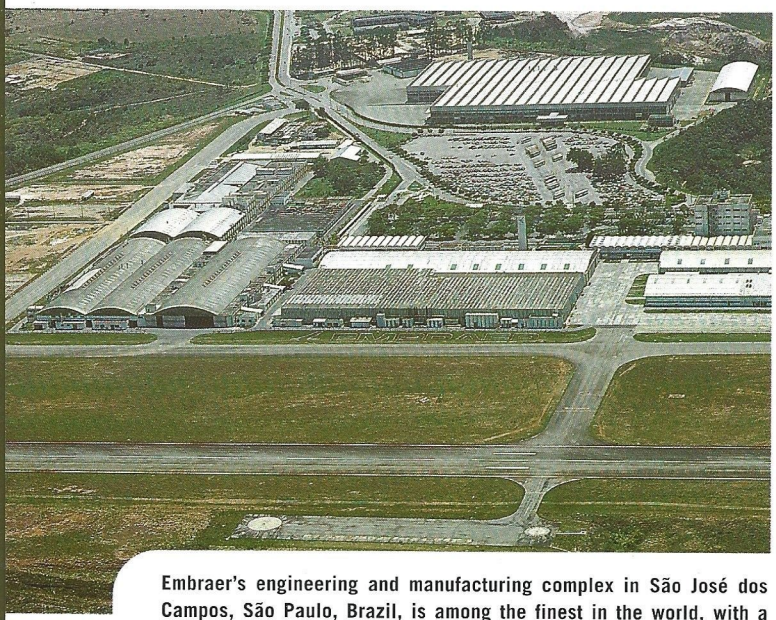
At Embraer, our customers are more than the purchasers of our products and service. They are the inspiration for everything we do.

about Embraer

every design begins with the customer's needs

Embraer was founded in 1969 as a government entity, and was privatized in 1994. In 1995, the company began major investment and restructuring programs to position itself as a market-sensitive world leader in the highly competitive aerospace industry. The entrepreneurial spirit that now pervades Embraer has already resulted in significant improvements in efficiency, quality, service and profitability.

One demonstration of our capability are the leading aerospace companies that have chosen Embraer to manufacture components for their own aircraft. We supply precision-machined parts for Boeing 777 aircraft, as well as components for such other major aircraft manufacturers as the former McDonnell-Douglas and Sikorsky. In many cases, Embraer is the sole supplier, indicating the confidence these manufacturers have in our long-term ability to meet their needs.



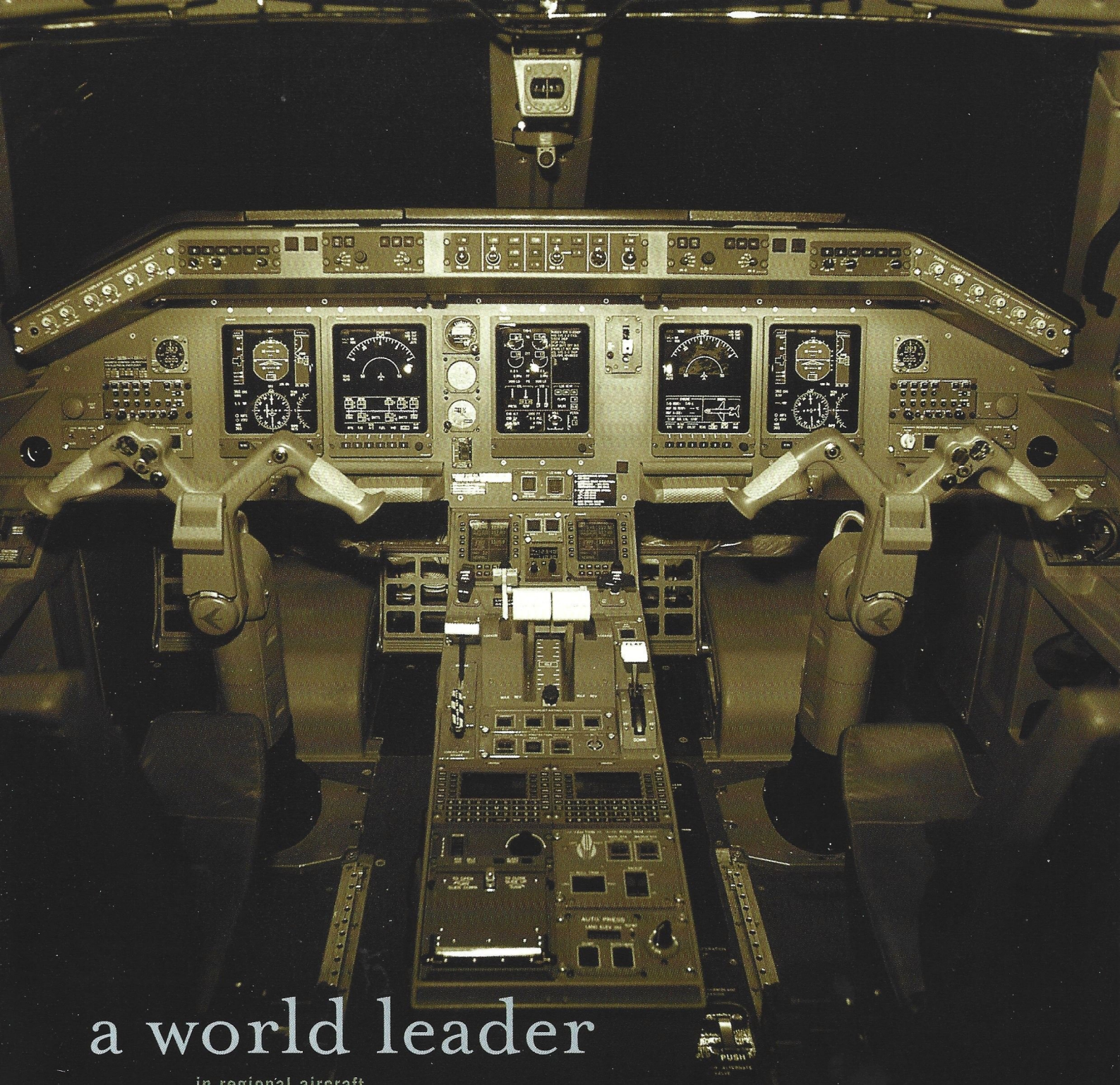
Embraer's engineering and manufacturing complex in São José dos Campos, São Paulo, Brazil, is among the finest in the world, with a long-standing commitment to quality.

Other companies have joined with Embraer in licensing agreements, partnerships and co-development programs. We were licensed to produce the MB-326 from Aermacchi of Italy and light aircraft from Piper in the United States. In turn we licensed production of the Tucano in the United Kingdom and Egypt. We developed and are producing the AMX with Alenia and Aermacchi of Italy.

At the same time, we have sought out the best partners to enhance the capabilities of our own aircraft. We work in partnership with Alenia and Aermacchi from Italy, Elbit from Israel and Ericsson from Sweden to develop and produce our defense related products. For our regional jet programs, our risk partners include Gamesa (Spain), Sonaca (Belgium), C&D Interiors (US) and Enaer (Chile). These partnerships strengthen Embraer's relationships with some of the world's largest aircraft/aerospace manufacturers and suppliers, help the company improve its manufacturing processes and provide continuous access to new information and technology.

Finally, Embraer has received ISO 9001 certification for the design, production, sales and servicing of aircraft and its parts.

In short, we have put in place the strategies, processes and partnerships that will lead to solid performance and growth in the years ahead.



a world leader

in regional aircraft

Regional jets—32 to 70 seat aircraft with ranges of 800 to 1,700 nautical miles—are the fastest-growing market segment in commercial aircraft, and Embraer occupies a commanding position in the field. Regional airlines in North America, Europe and South America are ordering our ERJ-145 at a rapid pace, and Embraer is increasing its manufacturing capacity in response. The EMB-120 *Brasilia* is a leader in the market for 21-40 seat passenger aircraft. And our new ERJ-135 will fill the need for an affordable, reliable 37-passenger jet.

For regional airlines seeking to expand the frequency of service, expand their route structures or tie more cities into their hub airports, the needs are clear: affordability, low maintenance, high performance. And the choice of aircraft is clear. Embraer is leading the way.

ERJ-145

from takeoff to a market leader in less than a year

There's no better proof of Embraer's ability to meet customer needs than the stunning success of the ERJ-145. Less than a year after its first delivery in December 1996, it became a global leader in the regional jet market.

The reason is simple: It can dramatically reshape a regional airline's potential for profit and growth. That's because this new-generation 50-seat, pressurized twin-turbofan airliner represents a totally new approach to satisfying the needs of both passengers and the airlines that seek to serve them.

Passengers like the comfortable seating, spacious lavatory, large overhead bins and ample baggage capacity. The ERJ-145 offers them the widest aisle of any aircraft in its class, plus generous stand-up head room and

The Embraer RJ145 is the first regional aircraft in the world to be designed nose to tail on a computer-assisted engineering, design and manufacturing (CAE/CAD/CAM) system. The results are impressive: a reduced manufacturing assembly time, excellent quality and lower production costs.

ergonomically-designed seating. And since the ERJ-145 can cruise at altitudes up to 37,000 feet, passengers are guaranteed a fast, quiet, comfortable ride high above the weather.

Airlines appreciate the combination of jet performance with low operating costs. The cockpit features the most advanced electronic flight instruments and digital computerized flight control systems. Maximum cruise speed is 450 knots (Mach .78) and range (fully loaded) is more than 1,300 nautical miles.

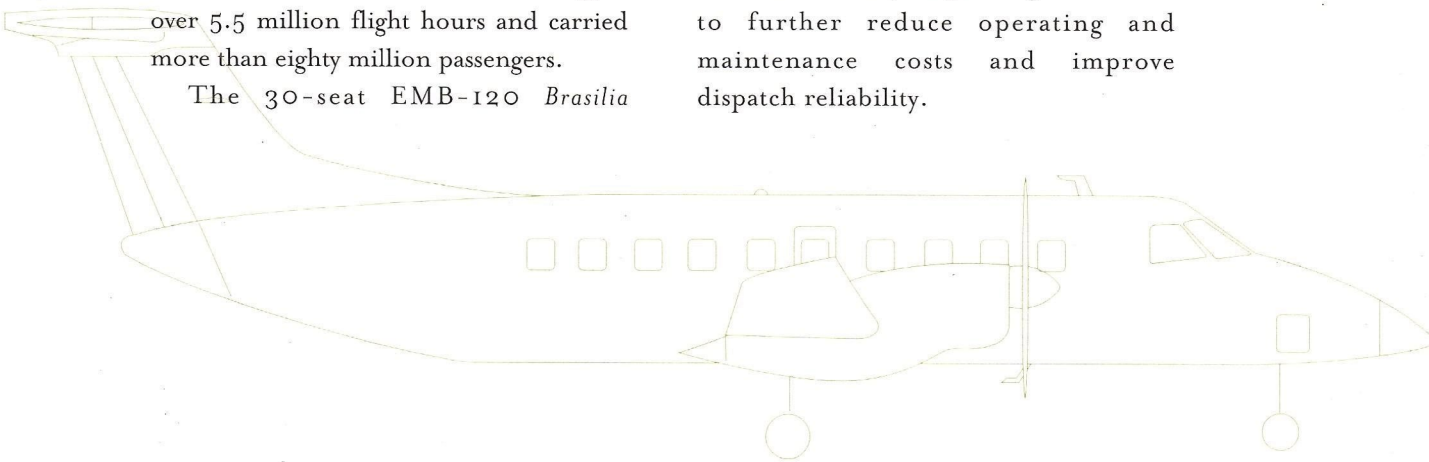
By carefully controlling development costs, Embraer is able to offer full jet features at a price close to that of a turboprop. In fact, more and more regional airlines are discovering that the ERJ-145 is far and away the best value in the regional jet industry.

EMB-120 *Brasilia*

the mainstay for shorter routes

Bigger isn't necessarily better when it comes to opening up new routes or linking nearby cities to a regional hub. Since its introduction in 1985, the EMB-120 *Brasilia* has become a mainstay on short-haul routes worldwide. To date, it has logged over 5.5 million flight hours and carried more than eighty million passengers.

The 30-seat EMB-120 *Brasilia* turboprop combines high cruise speeds (up to 300 knots) with low operating costs. The cockpit features electronic flight instruments and digital computerized flight control systems. We are continuously improving the *Brasilia* to further reduce operating and maintenance costs and improve dispatch reliability.



ERJ-135

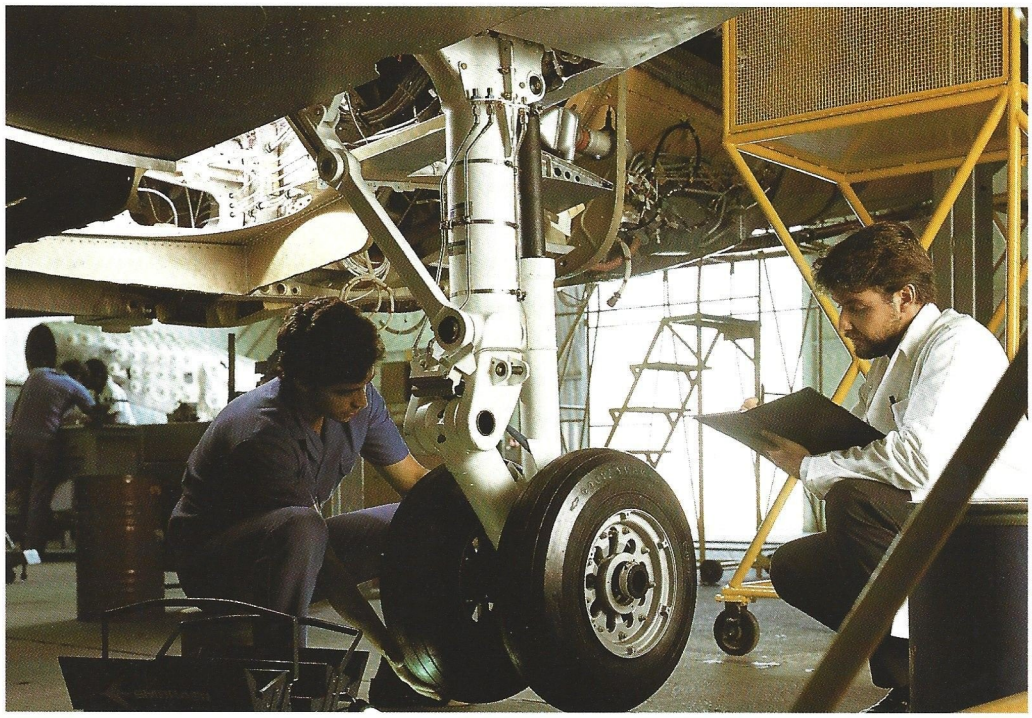
the newest addition to the Embraer family

The Embraer RJ145 has become such a success among regional airlines that, in 1997, Embraer introduced a smaller version to serve the increasing demand for a world-class regional jet that carries under 40 passengers. With twin turbofans, the ERJ-135 offers all the benefits of the ERJ-145, including excellent performance, low noise and fuel consumption, and low acquisition, operating and maintenance costs. To make things even easier for customers, maintenance and training procedures are practically identical to those of the ERJ-145 with commonality between the two aircraft reaching the level of 95%.

It is clearly designed to make the most of the most popular features of the ERJ-145. It has Rolls-Royce/Allison engines, like the ERJ-145, and the same main systems. It has the same cockpit, wing, tail and roomy fuselage; the only difference is that it is 11.6 feet shorter and holds 37 passengers rather than 50.

commitment to service

that assures increased fleet utilization



It's a simple equation: Less time on the ground means more time in the air. Regional airlines can carry more passengers, serve more cities and earn more profits. Military organizations can achieve a higher state of mission readiness and fly more missions successfully.

To help our commercial and military customers maximize fleet utilization, Embraer takes a highly proactive approach to customer service and support. Our commitment begins even before the sale, and never ends until the aircraft is retired from service.

The first step is to establish a single Embraer point of contact for each customer, for all issues concerning parts, maintenance, modifications and training. For the customer, finding the right person to talk to is never a problem.

Embraer's customer service team is available to all its customers 24 hours a day, seven days a week, and help can be quickly provided from our customer service centers in Brazil, United States, France and Australia.

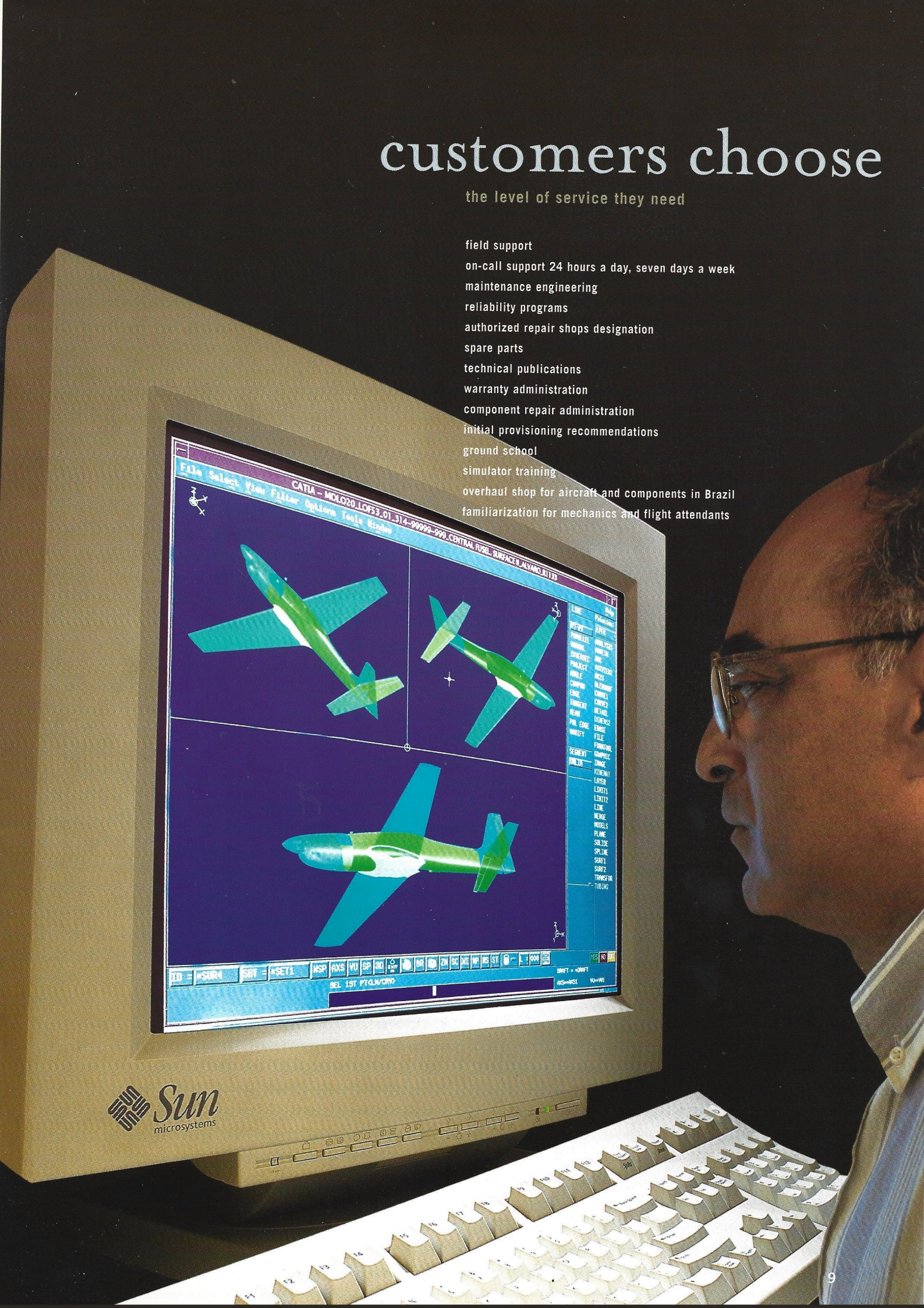
Embraer's service programs are tailored to the specific needs of each customer. While one carrier may need Embraer parts, mechanical and technical support, for example, another may perform its own maintenance work and simply requires access to one of Embraer's regional parts pools.

We also provide a full array of training programs for pilots, mechanics, flight attendants and ground crews, using full-flight simulators and computer-based, interactive classroom instruction. Overall, our training gives maintenance crews the special insight they need to keep fleets flying at peak reliability, and assures that flight crews know how to use every Embraer feature to enhance the efficiency and safety of their operation.

customers choose

the level of service they need

field support
on-call support 24 hours a day, seven days a week
maintenance engineering
reliability programs
authorized repair shops designation
spare parts
technical publications
warranty administration
component repair administration
initial provisioning recommendations
ground school
simulator training
overhaul shop for aircraft and components in Brazil
familiarization for mechanics and flight attendants



outstanding aircraft

for training, surveillance and combat missions

Embraer begins the design process for all its military aircraft by asking two fundamental questions: Which missions the aircraft have to accomplish? What's the optimal aircraft to accomplish the mission?

From long experience, we know that ground conditions are seldom ideal, that turnaround time and maintenance materials are usually scarce and that the pilot often needs to return to base despite severe damage to his aircraft. The greatest tribute to our military aircraft is that they have earned the praise of both pilots and ground crews.

Embraer's versatile military aircraft incorporate state-of-the-art electronics, and combine high mission effectiveness with low life cycle costs. As a result, military forces around the world rely on them for training, surveillance and combat missions.

Super Tucano

advanced solution for training and operational needs

For more than a decade, Embraer has been an international leader in pilot training aircraft. The EMB-312 *Tucano* has become a standard for military pilot training and operational needs around the world, with more than 650 units in operation by 15 different Air Forces, including those of Brazil, United Kingdom and France.

The EMB-314 *Super Tucano* is the latest version added to the *Tucano* family; it incorporates the EMB-312 successful experience and several other improvements to enhance even more the outstanding training and operational capabilities.

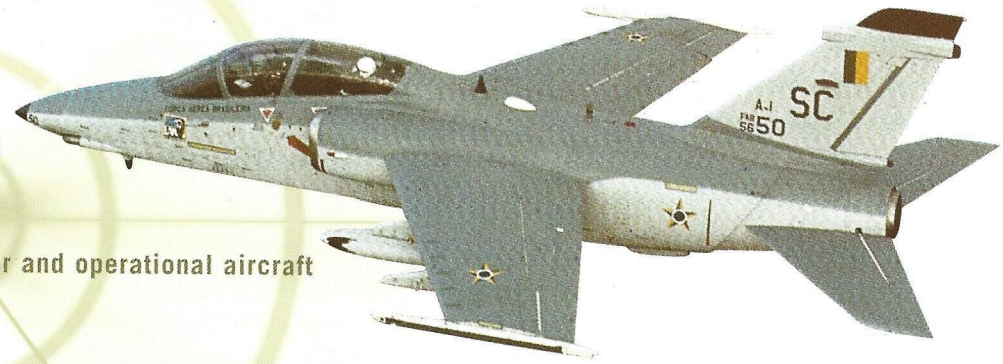
EMB-145 *AEW&C*

affordable solutions for reconnaissance and airborne air traffic monitoring

Embraer is producing advanced integrated systems based on the successful ERJ-145 regional jet platform, including Airborne Early Warning and Control (*AEW&C*) and Remote Sensing (*RS*) variants for air surveillance, environmental protection, natural resources survey, border monitoring and maritime patrol.

The EMB-145 *AEW&C*, equipped with an advanced Ericsson ERIEYE phased-array multimode radar system, represents the most affordable and capable Airborne Early Warning & Control solution for application worldwide. Technologically, it is the first new generation *AEW&C* aircraft in the market.

Ground surveillance and environmental protection activities are covered by the EMB-145 *RS*, the most advanced Remote Sensing System available.



AMX-T

fighter lead-in trainer and operational aircraft

The AMX-T is a new generation twin seater, high performance subsonic turbofan jet, specifically designed for Advanced and Fighter Lead-in Training. It maintains the unsurpassed operational characteristics of the AMX fighter already in operation with the Air Forces of Brazil and Italy.

The AMX-T features the best and most efficient solution to prepare military pilots for the top line 4th generation fighters. The aircraft provides the required performance to let the pilots to be acquainted with the new demands of the modern operational scenario.

The AMX-T new generation avionics suite features the latest technology available in the most advanced Man-Machine Interface of the market. A fully ergonomic cockpit and a complete night operations capability allows the student pilot to focus in the mission.

The operational flexibility allows the use of AMX-T with high efficiency in ground attack operation.

we're where we want to be

to go where we want to go

Today, Embraer is solidly positioned in the fastest-growing segments of the aerospace market, with a strong and clearly-defined competitive advantage.

Our entire organization is focused on meeting the requirements of our customers worldwide. We are fully devoted to add value for them by offering faster and higher returns on their investments.

We produce aircraft designed to meet customer needs. We utilize state-of-the-art technology, yet firmly control development costs. As a result, Embraer aircraft enhance customer profitability and mission readiness from purchase to retirement. They are economical to acquire, efficient to operate and easy to maintain.

It's a simple equation: Less time on the ground means more time in the air — more passengers carried, more cities served, profits earned by every plane in every commercial fleet.

This success has led to dramatically increased demand for Embraer aircraft.

So we are continuing to invest heavily in technology, and continuously seek to improve our manufacturing processes, training, communications and other procedures to further enhance productivity and product quality.

We have in place a financial strategy to assure the company's solidity through economic uncertainties and to provide the resources for our continued growth.

Embraer is committed to expanding its global leadership in clearly-defined and fast-growing niches within the commercial and military aircraft industries, and we have in place the financial, technological, production, sales and service resources to achieve that goal.

Qualified and committed employees are the basis of our achievements in this globalized and competitive aerospace environment where Embraer has succeeded in providing the conditions to build an organization formed by a group of outstanding, results-oriented, highly trained and motivated professionals dedicated to serve our customers.

The future is bright, and Embraer is ready for it. Please fasten your seat belts and enjoy the flight.

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